

# Release Detection Requirements for Above Ground Storage Tanks



For more information write or call:

New Mexico Environment  
Petroleum Storage Tank Bureau  
2044 Galisteo Street  
Santa Fe, NM 87504

(505) 984-1741



New Mexico  
Environment Department  
Petroleum Storage Tank Bureau  
2044 Galisteo Street  
Santa Fe, NM 87504

All existing above ground storage tank (AST) systems must have release detection by August 15, 2004. New AST installed systems must have a method of release detection upon installation.

## What Is Required

### Piping

All pressurized piping must have operating automatic line leak detectors. These devices alert the operator to the presence of a leak by restricting or shutting off product flow. They must be tested annually to ensure they are properly installed, maintained, and can detect leaks of three (3) gallons per hour at ten (10) pounds per square inch within one (1) hour. The records of these tests, all calibrations, maintenance, and repairs must be maintained at the facility for at least one (1) year. In addition to the leak detector requirement, piping must have either an annual pressure test or be monitored monthly by interstitial monitoring, visual inspection, or another approved method.

If the piping system is on a suction system, the piping needs only to have a tightness test every three (3) years if the check valve is not located directly under the pumping motor. No line test is necessary if the check valve is under the motor or if the piping is monitored monthly by interstitial monitoring or visual inspection.

### Tanks

All ASTs must be monitored monthly for the potential loss of product. One (or a combination) of the following methods **must** be used to monitor the tanks:

- **Automatic Tank Gauging**

This equipment tests for loss of product and conducts inventory control. It must be capable of detecting at least a 0.2 gallon per hour loss of product. The system may require the tank system to be shut down for a period of time, usually during hours of non-operation.

- **Interstitial Monitoring**

This method of monitoring can include sensors placed in between the wall of the tank or piping and an impervious secondary barrier, or construction of an impervious secondary barrier that will allow for monthly monitoring of the space between the tank and the barrier.

**Double-Walled Systems.** Most manufacturers of double-walled AST systems offer monitoring systems that are field installed or factory installed. The monitoring systems may be either electronic or manual and may be connected to automatic monitors.

- **Visual Inspection**

Visual inspection of an AST may be used to meet the requirement of monthly

monitoring. The following requirements must be met in order to use this method:

- 1) The tank must be completely visible and readily accessible.
- 2) The tank must not be in contact with the ground or soil.
- 3) A log must be kept at the facility, which will include the date, time, initials of the inspector(s), comments on the condition of the tank, and the results of each inspection.

Visual inspection monitoring may be used for piping associated with an AST if the piping meets the following:

- 1) All portions of the piping are completely visible and readily accessible.
- 2) Piping is not in contact with the ground or soil.
- 3) A log must be kept at the facility, which will include the date, time, initials of the inspector(s), comments on the condition of the tank, and the results of each inspection.

### Note:

If the owner wishes to use another method of release detection that they believe will provide equivalent protection of the environment, as the methods listed above, they must submit their plans to the department. The owner shall not begin installation unless the department approves the request in writing.